the medicine for the rare indication as distinct from the costs of the medicine for the common disease.

PHP16

THE IMPACT OF FINANCIAL INCENTIVES ON ADHERENCE TO THERAPEUTIC TREATMENT – INSIGHTS FROM AN ECONOMIC EXPERIMENT

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OBJECTIVES: The present study contributes to and augments the few economic attempts to explain medical non-compliance. To this end, an "economic investment model" is suggested as conceptual framework reflecting the three phases typically observed in medical treatments: "invasion", "high compliance" and expected variations in compliance behavior. Based on this framework a cost-neutral incentive scheme is developed; the impact of this incentive scheme on adherence is evaluated. **METHODS:** Behavioral predictions were empirically evaluated by suggesting an experimental design that incorporates the key features of the conceptual framework. Computerized economic experiments with investment decisions over 12 periods were run (September - December 2011) with subjects recruited from a pool of approx. 1800 students from different fields of study. 107 and 102 subjects participated in the baseline and in the incentive treatment, respectively. Instructions were context-free, thus no associations with medical treatments, pharmacies etc. could emerge, possibly influencing subjects' decisions in an uncontrolled way. **RESULTS:** In the baseline treatment, adherence drops significantly closely before ($p=0.03$, McNemar, two-sided) and closely after ($p=0.016$, McNemar, two-sided) a reference point (period 6), which is constituted by costs imposed by the invasion phase. In the incentive treatment only one significant drop from period 9 to 10 ($p=.016$, McNemar, two-sided) exists. Especially in the last periods of the experiment the proportion of subjects switching to non-adhere is weakly significantly higher in the baseline treatment than in the treatment with monetary incentives ($p=0.06$, Wilcoxon, two-sided). **CONCLUSIONS:** Decisions predicted by behavioral economic theories similar to those documented in other contexts are at play in this experimental setup and explain why adherence switches to non-adherence at some point. By using financial incentives this switching point is shifted towards the end of the "therapeutic treatment". Thus, adherence is observed over a longer span compared to a design providing no financial incentives.

PHP17

NATION-WIDE SURVEY OF PATIENTS' ATTITUDE TOWARD LOW PRICE MEDICINE

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OBJECTIVES: Large amounts of health care cost are spent on drugs in Korea, 29.6% of total health care expenditure in 2009, and these amounts are continuously increasing. To control spending on prescription drugs we had tried to adopt the reference pricing system in 2001, but it failed due to patients' negative perception and shortage of infrastructure. Recently, it is estimated that the technical circumstances are prepared. Yet the public perception has not been checked whether it has been changed or not. The aim of this study was to ascertain the patients' willingness to exchange the prescribed drug for the cheaper one in order to predict the acceptability of the reference price system. **METHODS:** Nation-wide telephone interview survey was conducted for 1000 consumers from October 19 to 26, 2011. **RESULTS:** Patients were asked whether they would exchange the drug prescribed by their doctor for the cheaper drug of which therapeutic effectiveness is equivalent. Of 1000 respondents, 647(64.7%) answered "Yes (I will exchange)". And the reasons of the 353 consumers who responded "No (I will not exchange)" are; their trust in doctor's judgment (56.1%, n=198), little confidence in the equivalence between the medications (35.1%, n=124), and there is no great difference among the cost of medicines in general (8.8%, n=31). **CONCLUSIONS:** Patients' attitude toward lower price drug has been changed for last 10 years in Korea. They would likely to choose cheaper drugs if information of exchangeable drug options and prices is given at the time of prescribing or dispensing. It means that reference price system would be acceptable by patients and contribute to reduce the pharmaceutical expenditure in Korea. In addition, providing physicians with incentives to encourage prescribing low price medicines and restoring consumer confidence in equivalence of therapeutic effect are required to improve the effectiveness of the system.

PHP18

THE IMPACT OF PATENT EXPIRIES ON FUTURE DRUG SPENDING IN CANADA

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OBJECTIVES: Potential savings from generic drugs has become a key issue among Canadian policy makers, with public drug programs in many Canadian provinces reducing the amount they are willing to pay for generic drugs. This analysis examines generic drug spending in Canada, and looks at future patent expiries to estimate the potential for savings in coming years. **METHODS:** This study examined wholesale purchase data from IMS Brogan's Canadian Drug Store and Hospital Purchases Audit for all Canadian provinces between October 2004 and September 2010. Health Canada's Patent Register and Drug Product Database were used to estimate future dates of generic entry. **RESULTS:** Between 2004-05 and 2009-10, purchases of generic drugs grew at 15.0% per year, three times faster than purchases of brand name drugs. This increased the generic share of the Canadian drug market from 17.0% to 25.9%. Further increases in the generic share are expected as drugs with patents expiring between 2010 and 2014 accounted for 38.2% of all purchases of prescription drugs in Canada in 2009. Drugs with patents expiring beyond 2014 accounted for only 8.2% of drug purchases. **CONCLUSIONS:** Findings suggest that there is potential for significant savings arising from new generic competition in the next few years. The magnitude of these savings will depend on the degree to which policy changes impact generic prices. However, there may less opportunity in the longer term. This issue is compounded by uncertainty as to the regulatory requirements, manufacturing processes and pricing for "generic" versions of biologics.

PHP19

LONGITUDINAL ANALYSIS OF USTEKINUMAB DOSING IN PATIENTS WITH OR WITHOUT PRIOR BIOLOGIC EXPERIENCE IN THE WOLTERS KLUWER SOURCE® LX NATIONAL HEALTH CLAIMS DATABASE

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OBJECTIVES: To report ustekinumab dosing patterns in a large United States (U.S.) retrospective healthcare claims database. **METHODS:** Patients with ustekinumab prescriptions between 9/25/2009 and 12/31/2010 (first claim set index date) and continuous activity in the Source® LX database (≥6 months pre- and ≥6 months post-index) were included. Patients with evidence of other biologics during ustekinumab treatment were excluded. Dosing was evaluated for the first 5 prescription fills. Dose changes were assessed for subsequent doses post-index and classified as "higher than", "same as", or "lower than" the initial dose. The dosing interval was defined as days between consecutive fills. Biologic experience was defined as ≥ 1 claim for another biologic pre-index. **RESULTS:** A total of 473 patients were evaluated (mean±SD age was 49±12 years; 46.3% female). 64.7% (n=306) of patients were bio-experienced, while 35.3% (n=167) had no history of biologic use before ustekinumab (bio-naïve). Initial doses of 45 mg were observed for 69.3% of bio-experienced and 72.5% of bio-naïve patients. Initial doses of 90 mg were observed for 30.7% of bio-experienced and 27.5% of bio-naïve patients. Subsequent doses were the same as or lower than the initial dose for the majority of all (92.2%-96.8%), bio-experienced (91.6%-97.7%), and bio-naïve (90.2%-95.2%) patients at each fill. Overall median/mean dosing interval was 28/34 days for the first to second fill. Median/mean dosing intervals for subsequent fills spanned 86-88/85-89 days. Dosing intervals were similar among bio-experienced and bio-naïve patients. **CONCLUSIONS:** In this longitudinal study of ustekinumab utilization in a US healthcare claims database, nearly three-quarters of ustekinumab users had prior treatment with biologics. Over two-thirds of initial ustekinumab doses were 45 mg. Most patients remained at or below their starting dose. Dosing intervals were consistent with prescribing recommendations (approximately one month for first 2 doses, followed by quarterly intervals). Dosing patterns in bio-experienced and bio-naïve patients were similar.

PHP20

FACTORS ASSOCIATED WITH PRIMARY NONADHERENCE TO CHRONIC AND ACUTE MEDICATIONS

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OBJECTIVES: To identify factors associated with primary nonadherence [PNA]. **METHODS:** This retrospective cohort study identified all new prescriptions written in an integrated health care system for 10 therapeutic drug groups over a three-month period (12/1/2009 - 2/28/2010). Study drugs included: antiinfectives, analgesics, migraine medications, antidiabetics, osteoporosis medications, cardiovascular agents, antihyperlipidemics, antiasthmatics, antidepressants, and anticoagulants. PNA was defined as the failure to fill a prescription within 14 days of when it was written. Stepwise multivariable logistic regression was used to identify significant patient, provider and prescription characteristics associated with PNA. **RESULTS:** A total of 569,095 new prescriptions were written for the study drugs of interest during the study period. Across all drug groups, the PNA rate was 9.8%. PNA rates for individual drug groups varied and were highest for osteoporosis medications (22.4%) and antihyperlipidemics (22.3%). Patients were more likely to be primary nonadherent if they were black, were not prescribed any drug from the same therapeutic drug group during the past year, or had certain baseline comorbidities. Also, patients who received brand name or multiple concomitant prescriptions were more likely to be primary nonadherent. In contrast, patients who filled at least one prescription in the prior year, had dual insurance or Medicaid coverage, or had a prescription for a symptomatic disease were more likely to fill their prescription. Patients who received prescriptions written by emergency medicine, pediatrics, or urgent care were less likely to be primary nonadherent. Factors associated with PNA were mostly consistent across all drug groups, but the estimated direction and significance of some factors, such as patient gender and age, depended on whether the treatment was acute or chronic. **CONCLUSIONS:** These results may be used to facilitate clinicians and payers in making informed decisions when designing and implementing cost-effective patient interventions to improve overall adherence to medications.

PHP21

COMPLEMENTARY AND ALTERNATIVE MEDICINE USE AMONG PEOPLE WITH DISABILITIES: NHIS 2007 SURVEY

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OBJECTIVES: To compare rates of Complementary and Alternative Medicine (CAM) use among individuals with and without disabilities. **METHODS:** We used a cross-sectional design. Our data source was the 2007 National Health Interview Survey files and the Adult Complementary and Alternative Medicine Supplement. Individ-